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AGO/DA ltr, 29 Apr 1980

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### DEPARTMENT OF THE ARMY

OFFICE OF THE ADJUTANT GENERAL WASHING ON, D.C. 20310

IN REPLY REFER TO

AGAM-P (M) (11 Apr 68) FOR OT RD 681088

16 April 1968

SUBJECT: Operational Report - Lessons Learned, Headquarters, 36th Signal Battalion (CA), Period Ending 31 January 1968 (U)

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BY ORDER OF THE SECRETARY OF THE ARMY:

l Incl

Jenneth G. Neicklam.
KENNETH G. WICKHAM

KENNETH G. WICKHAM
Major General, USA
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26

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### DEPARTMENT OF THE ARMY HEADQUARTERS, JOHN SIGNAL BATTALION (CA) APO San Francisco 96491

SCCVSG-CA-O

12 February 1968

SUDJECT: Operational Report for Quarterly Period Ending 31 January 1968, Headquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65) (UIC): WCLETO

#### SECTION I: SIGNIFICANT UNIT ACTIVITIES

1. General: The period 1 November 1967 - 31 January 1968 was characterized by many significant activities brought about by the relocation of tactical elements within the III Corps Tactical Zone. Certain redeployments within the battalion were effected as reported herein. Communications requirements increased while personnel strength decreased. No unit gains were experienced by the battalion during the quarter. Deployment of units arriving the latter part of the previous quarters will be covered in detail.

#### 2. Personnol:

- c. Maintenance of Strength: The 36th Signal Dattelion maintained a personnel strength which enabled the unit to accomplish the assigned mission. The unit had an approximately 7% turnover in personnel.
- b. Rotational Humps: The program for reducing the rotational humps in the 324th Signal Company and the 327th Signal Company was implemented in January. A total of 102 Hi were involved. Due to the geographical dispersal of many of these personnel throughout the southern part of South Vietnam, redeployment of these personnel presented special problems which were officiently overcome as of the termination of the reporting period.
- c. Decorations and Awards: Heroism and outstanding performances of duty were recognized by the award of two (2) Bronze Star; six (6) Purple Hearts; and five (5) Army Commendation Medals.
- d. Morale and Discipline: The morale and discipline of personnel of the battalien continued at a high level. The unit continued to identify and develop programs designed to advance merale and to curb the number of disciplinary cases. Procurment of dayroom facilities, movie projectors, magazines and other recreational items have been instrumental in the success of these programs.

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SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,
Headquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65)
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#### 3. Operations:

a. Communications Concept: Procedures and policies continued to reflect the Army Area communications concept. A refinement of existing reporting practices has enabled a more responsive reaction to the needs of the subscriber. The 36th Signal Battalion continues to provide base camp communications throughout the north central portion of the III CTZ. Microwave and troposcatter is also provided at selected sites within the IV CTZ (base camp responsibility remaining with other signal battalions).

#### b. Tasks:

- (1) Deployment of the 324th Signal Company:
- (a) The 324th Signal Company (Radio Rolay) arrived in RVN on 24 October and was deployed IAW 2d Signal Group OPORD 4-67 (see inclosure 1) commencing 13 November 1967.
- (b) Approximately two-thirds of the unit's resources were deployed during the period 13-16 Heverber 1967. One radio relay plateen, augmented by one-third of a carrier plateen, remained with the 324th to be deployed within the 36th Signal Battalien area. Six communications vans (2 FRC-69's, 2 FRC-54's and 2 MCC-6's) were assigned as a 2d Signal Group Viif contingency team. Elements of the unit going to other signal battaliens within 2d Signal Group were attached to those units for operational control. The 324th retained transfer and premotion authority for TOXE personnel and equipment. In all cases, the receiving units arranged transportation for elements detached from the 324th. One half of the 2d Signal Group contingency team was immediately deployed in the Vung Tau area to support tactical units. The major portion of 324th resources remaining within the 36th Signal Battalien were counitted during the period 18 November 1967 thru 15 January 1968. At the end of the current reporting period the 324th Signal Company was positioned at twenty-five (25) sites throughout the III and IV CT2's.
- (2) Deployment of the 513th and 517th Signal Detachments: Both signal detachments arrived in RVN 24 October 1967. IAW 2d Signal Group OPOID 4-67 these detachments were held as a contingency reserve. The 513th was committed to provide troposcatter communications to units in the 21st Signal Group area of responsibility.

SCCVSG-CA-0

12 February 1968

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,

Headquartors, 36th Signal Dattalion (CA), (RCS CSFCR-65)

(UIC): WCEETO

- (3) Displacement of the Headquarters, 595th Signal Company: To obtain more effective control over communications provided Headquarters, 1st Infantry Division, the 595th Signal Company Headquarters, was relocated from DiAn to Lai Khe. Relocation was initiated on 28 January 1968; this move paralleled the displacement of the 1st Division Main Command Post to Lai Khe.
- (4) Force Development and Organization: During the reporting period a revision of existing TO&E's and MTOE's was completed; the new MTOE's were forwarded for approval. All elements of the battalion have had changes in mission requirements. New mission statements and MTOE Designator's for each company within the 36th Signal Battalion are as listed at Inclosure 2.
  - (5) Establishment of a Signal Complex at Song De, RVN:
- (a) IAW with 36th Signal Dattalion OPORD 1-68, 3 January 1968, (Inclosure 3) a signal complex was established at the Nui Da Ra Airfield (NDA) and atop Hill 723 (NDR) adjacent to the airfield (Geographical Name: Nui Da Ra).
- (b) Elements from Company B44, 36th Signal Lattelion, established a terminal site on the cirfield, providing telephone switch-board (AN/MTC-1), communications center (AN/MSC-29), and terminal radio and carrier services to tactical units in the area.
- (c) The 324th and 327th Signal Companies jointly established a radio relay site at NDR, relaying to NBA and into the MACV Compound in the city of Song De (the largest city in the area). The site provided troposcatter and VHF relay from several major base camps within the III CTZ.
- (d) The project was initiated in support of requirements which existed for the period 16 December until the present; however, due to changes in the tactical desposition of units in the area minimum services are now required. All terminal equipment (switchboard and connecenter) have since been deactivated.
- (6) The 36th Signal Dattalion consists of the following units:

SCCVSG-CA-O

12 February 1968
SULJECT: Operational Report for Quarterly Period Ending 31 January 19 68,
Headquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65)
(UIC): WCEETO

- (a) Headquarters Company: HHC of the 36th Signal Dattalion operates and maintains the Dattalion Headquarters.
- (b) Company A44, 36th Signal Battalion: Company A44, 36th Signal Battalion operates and maintains signal communications facilities at Bien Hoa, RVN, in support of the U.S. 101st Airborne Division Headquarters and USNACV Advisory Headquarters III Corps ARVN, Bien Hoa Sector Headquarters, Capital Military District and U.S. Army Units on the military base. Communications provided includes switchboards (8 position AN/TTC-7 in conjunction with an AN/TTC-28, 600 line PABX and 1 position SD-249), telephone installation service, multi-channel radio relay and carrier systems (AN/TRC-24 and AN/GRC-50), secure radio teletype and communications center support.
- (c) Company D44, 36th Signal Battalion: Company D44, 36th Signal Battalion provides Army Area Communications at the 1st Division Artillery base camp, Phu Loi, RVN. The company also operates Army Area Communications Sites at Song Do, Hon Quan and Quan Loi, RVN.
- (1) Phu Loi: Communications provided at Phu Loi includes switchboard (6 position, AN/TTC-7), telephone installation service, multi-channel radio relay and carrier (AN/TRC-24 and AN/GRC-50), communications center, and secure radio teletype to support a U.S. MACV Advisory Team.
- (2) Song De: Communications facilities for 5th ARVN Division Advisory Team, 5th Special Forces and U.S. Units (NDA) are operated by the 2d Platoon of Company D44. Services provided include telephone switchboard (1 position SE-86) telephone installation service, radio relay and carrier and secure radio teletype providing communication center services.
- (3) Quan Lei/Hon Quan: Third Platoon, Company D44, provides area communications at Quan Lei and Hon Quan, RVN. Facilities provided by the 3rd Platoon include switchboard (3 position, AN/MTC-1), telephone installation service, communications center and multi-channel radio relay and carrier services. The 3rd Platoon also provides simular services to the U.S. Advisory Team at Hon Quan. Facilities include switchboard (SB-86), telephone installation service, secure radio teletype, VHF radio relay and carrier and communications center services.

SCCVSG-CA-0

12 February 1968

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,

Headquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65)

(UIC): WCEETO

- (d) 595th Signal Company: Company Headquarters is located at Lai Khe, RVN. The 595th Signal Company operates and maintains area communications at Lai Khe, DiAn and Phuoc Vinh, all of which are 1st Infantry Division Base Camps.
- (1) Lai Khe: Communications support for 1st Infantry Division Headquarters at Lai Khe is provided by the "Red" Platoon of the 595th Signal Company. Facilities provided include switchboard (8 position, AN/TTC-7), telephone installation service, multi-channel radio relay and carrier (VHF and UHF) and communications center services.
- (2) DiAn: The 595th Signal Company's "Dlue" Plateon provides telephone services (1000 line DCO), radio relay and carrier (VHF and UHF) and communications center services for 1st Infantry Division Rear.
- (3) Phuoc Vinh: The "White" Platoon of the 595th Signal Company provides base camp support for the 1st Infantry Division at Phuoc Vinh. Communications include switchboard (3 position, AN/TTC-7), telephone installation service, radio relay and carrier (VHF and UHF), secure radio teletype and communications center services.
- (e) 327th Signal Company: The 327th Signal Company is responsible to install, operate and maintain troposcatter and microwave radio systems in the III and IV Corp Tactical Zones. Present sites are located at Long Binh, Saigon, Vinh Long, Can Tho, Hien Hoa, DiAn, Bearcat, Soc Trang, Phu Loi, Lai Khe and Nui Da Ra. Each of these sites are operated by tailored elements of the company.
- (f) 267th Signal Company (CC): Major cable construction in the III and IV CTZ's is the responsibility of the 267th Signal Company (GC). This company, although originally designed to do minor tactical construction, has installed over 975,000 feet of connercial multipair cable.
- (g) 324th Signal Company: The 324th Signal Company provides radio relay and carrier in the AACS throughout the III and IV CTZ. The deployment of the 324th Signal Company is as described in para 3b(1).

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SCCVSG-CA-O

12 February 1968

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968, Headquarters, 36th Signal Dattalion (CA), (RCS CSFCE-65) (VIC): WCEETO

- (h) 513th Signal Detachment: Furnishes tropospheric scatter radio communications on a contingency basis in III and IV Corp Tactical Zones.
- (i) 517th Signal Detachment: Furnishes tropospheric scatter radio communications on a contingency basis in III and IV Corp Tactical Zones.
  - c. Radio Relay and Carrier:
- (1) AN/TRC-24 (VHF) Systems: The 36th Signal Battalian operates and maintains twenty-seven (27) radio relay and carrier systems using the AN/TRC-24/AN/TCC-7 combination; this is an eleven (11) system increase over the previous quarter. New systems are indicated on the inclosed diagram (Inclosure 4).
- (2) AN/CRC-50 (UHF) Systems: During the reporting period the 36th Signal Battalian operated eleven (11) AN/CRC-50/AN/TCC-7 radio relay and carrier systems. In addition, three (3) systems using the new AN/CRC-50/AN/TCC-60, 61, configuration were activated between sites within the III CTZ.
- (3) Microwave and Troposcatter: All microwave and troposcatter communications systems are operated by the 327th Signal Company. The company currently operates thirteen (13) microwave and five (5) troposcatter systems. Equipment utilized includes:
- (a) Redios: AN/TRC-29, AN/TRC-90, 90A, 90B, AN/TRC-132 and AN/TRC-129A.
  - (b) Carrier: MX-106, AN/TCC-13.
- (4) As indicated below, twenty-three (23) radio antenna towers are employed at seventeen (17) sites operated in total or part by the 36th Signal Dettalion:

LOCATION	TIPE	HEIGHT
DiAn	AD-216	120°
Phu Loi	AD-216	162°
Phuoc Vinh	AD-216	204°

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SCCVSG-CA-0

12 February 1968

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,

Headquarters, 36th Signal Battalion (CA), (RCS CSFOR-65)

(UIC): WCEETO

LOCATION	TYPE	HEICHT
Dien Hoa	AD-216	1361
Lai Khe	AD-216	1621
Quan Loi	AD-216	1201
Hon Quan	AD-105	551
Song Be City	AD-105	551
Nui Ba Ra	AD-216	241
Long Binh	AB-216	204
	AD-216	204
Tan Son Nhut	French, self-supporting	1001
MACV I	Self-supporting	1601
MACV II	AU-216	1621
Can Tho	AB-216	1201
	AD-216	1801
	AD-216	1621
Soc Trang	Collins Tropo	601
-00 -1 mg	Collins Tropo	461
Vinh Long	Collins Tropo	781
	Collins Tropo	781
Octopus (Tan Son Nhut)		861
to topus (Lan Boar Miles)	Collins Tropo	861

#### d. Telephone Operations:

- (1) Telephone operations for the preceding quarter have been characterized by expansion and upgrade of existing facilities. An AN/TTC-28, 600 line PADX, was installed at Bien Hoa, RVN to upgrade the existing manual telephone system. The Bien Hoa Army 12 position AN/TTC-7 was reduced to 8 positions and re-engineered to provide manual trunk service (both local and long distance). The AN/TTC-28 offers approximately 510 dial lines to Army subscribers; limited direct dial trunking is also available.
- (2) The three (3) position AN/TTC-7 at Lai Khe was expanded to 8 positions to compensate for a proportional increase of subscribers. Prospects of further expansion or system upgrade to the AN/TTC-28 configuration are probabale.
- (3) In support of tactical activities in the Song De area, an AN/MTC-1 was placed into operation at NDR Airfield (NDA) for the period 16 December thru 28 January 1968. The new manual central office was designated "Song De South".

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SCCVSG-CA-O

12 February 1968
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,
Headquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65)
(UIC): WCEETO

(4) Several significant accomplishments were noted in the area of "outside plant" installation during the ninety day period. One of the major projects undertaken was the installation of a 1200 pair interconnect cable from Bien Hoa Army (MDF) to the Bien Hoa Air Force DCO (MDF); only kinor testing of splice cases remains to be done. In addition, major construction was completed at Phu Loi, Lai Kho, Quan Loi, Hon Quan, Dong Tam, Dau Tieng, Loc Ninh, Me Tho and Du Dop, RVN; all by the 267th Signal Company.

(5) The 36th Signal Battalion currently operates switch-boards at the following sites:

LOCATION	TYPE	STATUS
Bien Hoa	8 Pos, AN/TTC-7 600 line, AN/TTC-28	Fixed Temporary
Bien Hoa	3 Pos, AN/TTC-7	Temporery
Phu Loi	6 Pos, AN/TIC-7	May Expand
Quan Loi	3 Pos, AN/TTC-7	Fixed
Hon Quan	1 Pos, SD-86	May Expand
Song De	1 Pos, SD-86	May Expend
DiAn	1000 Line DCO	Fixed
Lai Khe	8 Pos, AN/TTC-7	May be Upgraded
Phuoe Vinh	3 Pos, AN/TTC-7	May Expand

#### e. Communications Center Operations:

(1) On 14 December a new communications center at III Corp, Dien Hoa was activated in lieu of the existing facility. The new communications center is a fully air conditioned, hard wired, custom designed fixed facility. Only minor faults in construction have been evident. Failure to provide standard wiring schematics with the MCPU has caused some problems.

(2) An AN/MSC-29 was activated at the Nui Da Ra Airfield (Song De) in support of activities as described earlier. The tactical equipment provided one full duplex circuit into the Bien Hoa Area Componer for the period 16 December 1967 thru 28 January 1968. Company D44 assumed responsibility for the operation.

SCCVSG-CA-0

12 February 1968

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,

Headquarters, 36th Signal Battalion (CA), (RCS CSFOR-65)

(UIC): WCEETO

f. Battalion System Control (DATCON): The 36th Signal Battalion operates a DATCON as its central communications control element. DATCON is responsible to report circuit/system status. DATCON also provides necessary data to local Tech Controls for circuit rerouting during system failures. The Battalion Control Network configuration is included.

#### g. Training:

- (1) The 36th Signal Dattalion received a training inspection 20 November 1967 by the 1st Signal Drigade (USASTRATCOM). Units inspected and results are as follows:
  - (a) Headquarters, 36th Signal Dattalion:
    - (1) Mandatory Training: Satisfactory
- (2) Functional Training: An adequate program was not available; however, functional training requirements have subsequently been programmed for fiscal year 1969 and personnel with functional skills are being requisitioned as needed.
  - (b) Headquarters and Headquarters Company: Satisfactory
  - (c) 327th Signal Company: Satisfactory
- (2) Training inspections are now conducted quarterly within the 36th Signal Battalion. Emphasis is placed on ensuring a well supervised OJT Program, cross training of individuals in critical MOS's, and the improvement of skills of those personnel that unit commanders feel need additional training in their primary MOS.
- (3) Dattalibn personnel have attended the following 1st Signal Brigade Signal Schools:
- (a) Technical Facilities Controllers Course: 2 Officers and 6 EM.
  - (b) Cable Splicers Course: 4 EM
  - (c) Troposcattor Operators Course: 19 EM

SCCVSG-CA-O

12 February 1968

SUDJECT: Operational Report for Quarterly Period Ending 31 January 1968
Headquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65)
(UIC): WCEETO

- (d) Microwave Operators Course: 16 EM
- (e) Radio Relay/Carrier Operators Course: 15 EM
- (f) AN/GRC-106 Operators Course: 4 EM
- (g) AN/TRC-110/117 (PCM) Operators Course: 20 EM
- (h) AN/GRC-50, PCM Carrier Maintenance Course: 1 EM

#### h. Intelligence:

- (1) Physical Security:
- (a) Establishing protective defense neasures for all communications facilities continued to be a program of major emphasis within the battalion.
- (b) Physical security measures were included in original development plans for the Mui Da Ra communications complex. The area in which this site is located and its susceptability to enemy activity required the shortest possible time span between initial installation of equipment and completion of protective defense measures. At the end of this quarter, physical security measures were almost 80% completed though the site has been operational for less than six weeks.
- (2) Counterintelligence: Counterintelligence inspections of all subordinate companies were conducted during November 1967. Follow-up inspections on some units during January 1968 showed considerable progress made in establishing and maintaining sound security programs. The increase noted in security consciousness of personnel as a result of greater use of security posters and other security information reminders was especially significant.
- (3) S-2 Administration: A recent change to AR 611-201 has placed a Secret security clearance requirement on certain MOS's which did not have it previously. This change significantly affects this battalion in MOS's 31M and 26L. With dissemination of this information to subordinate units, there has been considerable increase in initial processing for personnel security clearances. No problem is anticipated in meeting the new requirement.

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SCCVSG-CA-O

12 Fobruary 1968

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968, Headquarters, 36th Signal Battalion (CA), (RCS CSFOR-65) (UIC): WCMETO

#### i. Logistics:

- (1) During the quarter there were four (4) major projects generated within the logistics area. They consisted of: Completion of the Bien Noa Army Area Communications Center at III Corps; the initial and extended support of the Nui Ba Ra Communication Complex; the planning for the relocation of Battalion Headquarters and Headquarters Company, and; the development, to include transporting, of contingency teams. The latter includes Operation RAMASOON.
- (a) The Dien Hoa Army Area communications center was officially cut over to the new facility on 14 December 1967. Actions have been taken to adequately account for all property. There was some difficulty in determining maintanance responsibility for the air conditioners, generators, and the building and land on which the communications center is located. Through the assistance of the Dien Hoa Installation Engineer, this problem was overcome. All property has been accounted for on an installation property book and actions are now being taken to obtain a Table of Distribution Allowances (TDA).
- (b) The plans for Hei La Ra Communications Complex were initiated in December 1967.
- (1) On 16 December 1967, the initial flight consisting of 59 passengers and 3.5 tons of communications and personal equipment was transfered to Mui B. Ra. Mumerous flights, both fixed and retary wing have been used since to ship in additional personnel, equipment and natorial. A total of 138 tons of equipment was shipped as of 31 January 1968. A normal resupply operation was established with the 12th Aviation Group. Hot meals are delivered each Tuesday, Thursday, and Saturday, except on occasions where higher priority flights pre-empt the aircraft availability.
- (2) Problems have been encountered in transportation support. There were many cancellations of priority one (1) fixed wing flights due to higher priority requests. Rotary wing pick up times have not been accurate, causing personnel to stand guard over supplies for an excessive amount of time.
- (3) The proposed project completion date, (excluding NCA Projects) is set for 31 March 1968.

SCCVSG-CA-0

12 February 1968

SULJECT: Operational Report for Quarterly Period Ending 31 January 1968, Headquarters, 36th Signal Dettalion (CA). (RCS CSFOR-55)

(UIC): WCHETO

(c) During the quarter the Dattaliton S-4 was active in gathering equipment and material for deployment on Operation AMMSOCN. In addition, the task of arranging for the movement of two (2) tingency teens was assigned to S-4.

(2) In January 1968, both Company A44, 36th Signal Lattalion and the 595th Signal Company received the new MN/TRC-IIIO Telio Set and the new All/TCC-60 and 61 multiplexing equipment. Fifty percent of the PCM equipment has been installed with the assistance of the Reythern Corporation.

SECTION II: COMMANDER'S OBSERVATIONS AND RECOMMEDIATIONS

Part 1 Observations (losson: Learned)

1. Personnel:

ITEM: Malaria Pill

DISCUSSION: The effect of this pill has caused problems for certain personnel and deter them effectiveness.

OBSERVATION: Because of conditions in Vietnem mallering com be contracted easily, making it necessary to use some medication to protect against the disease. It is required that one malaria will be taken each week. This pill seems to have an undesimable effect on some individuals. Headaches, diarrhea and stouch ache, comsing a loss im the individual's effectiveness and sometimes loss in man hours mare characteristic.

#### 2. Operations:

ITEM: Operation of AN/FGC-25 Teletypewriter set at 1000 mpm.

DISCUSSION: During the past several months extended outages have been experienced on 100 wpn teletype circuits using the My/Tel 25. The equipment has proven to be unreliable when operated at this speed on a full time basis.

SCCVSG-CA-0

12 February 1968

SULJECT: Operational Report for Quarterly Period Ending 31 January 1968,

Headquarters, 36th Signal Battalion (CA), (RCS CSFOR-65)

(UIC): WCEETO

ODSERVATION: One frequent source of trouble is the clutch gears on the reperforator and page printer; they are easily worn down until the gears are stripped and the equipment cannot properly reproduce the characters indicated by the electrical impulses. Replacement parts are limited which further complicates the problem. It has been necessary to replace the FGC/25 with TT-76, TT-4, and AN/TGC-5 sets which proved more reliable.

ITEM: Installation of tactical antennas on non-standard towers and supports.

<u>DISCUSSION</u>: In many cases microwave and tropospheric scatter terminals are required in areas where space or ground obstructions do not permit the standard installation of tactical enterna masts, mounts or supports.

OBSERVATION: In the following instances the battalion has taken advantage of available towers and support structures not standard to the antennas or mounting brackets used, by obtaining specially fabricated brackets made by maintenance support units.

At MACV I in Saigon, adaptation of an AD-296/G antenna support, by use of these brackets, made possible the relocation of the terminal and elevation of the antenna. The additional antenna height improved radio receive levels and helped to reduce fading which was occurring prior to dawn each morning.

This procedure of adaptive mounting was also used with excellent results on 77UT2Y, an AN/TRC-132 tropospheric scatter system. Tactical 10 ft. solid parabolic antennas were mounted on an AN/TRC-132/U tower at Can The Airfield and on an extended AN/TRC-90 tower at Tan Son Nmut. This move provided necessary ground obstruction clearance, improving performance of this radio system, allowing channelization of teletype circuits and improving receive levels 10 db at each terminal.

ITEM: Adaptation of tropo antennas for high wind loading.

<u>DISCUSSION</u>: A problem with parabolic antennas has been encountered on sites located near landing pads for large helicopters.

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SCCVSG-CA-O

12 February 1968

SULJECT: Operational Report for Quarterly Period Ending 31 January 1968,

Headquarters, 36th Signal Lattalion (CA), (RCS CSFOR-65)

(UIC): WCEETO

CESERVATION: It was necessary to lower the ten foot tactical parabolic tropo antenna employed on top of Nui Ba Ra each time a Chinook approached the summit. The wind loading was far in excess of the limits to be endured while utilizing the standard base plate-guying configuration. A netal tube was set in coment. The antenna mast then served as a sleeve around the coment-reinforced tube. Conventional guying was doubled, allowing the antenna to withstand the high-velocity air currents created by the CH-47 Helicopters.

ITEM: Trouble shooting signaling circuits.

<u>DISCUSSION</u>: Control facilities have been reporting circuits inoperable because the AN/TTC-13 will not ring through on 20 HZ ringing circuits. The channel pulse would drop as designed; however, the subscriber failed to receive a ring.

OESERVATION: It is a standard practice to trouble shoot the circuits of an AN/TTC-13 system by attaching a field phone (TA-312/PT) to the terminal on the back of the AN/TCC-13. It has been found that by removing the TA-312/PT from the channel the ringing problem was corrected. No such problem exists where a TA-43/PT is used. It was noted that the TA-312/PT has a low impedence ringing circuit which loads the ringing circuit of the TCC-13 and thus degenerates the signal to the terminal instrument.

ITEM: Use of Mal7 Protective Mask.

DISCUSSION: All movement to the summit of Mui Ba Ra (Hill 723) must be accomplished by the use of helicopters. The hilltop was prepared by the engineers, leaving a covering of loose earth. This created a dust hazard when helicopters attempted to land or to load and discharge personnel and equipment.

OESEIVATION: When helicopters landed at Nui Da Ra Site they raised dust clouds which make it extremely difficult to perform normal functions outside of the vans which are on the hill. To alleviate this problem, the site members utilized their M-17 protective masks. The mask protected the eyes and filtered out the dust. It proved to be a worthwhile method of facilitating the continuance of normal site activities.

SCCVSG-CA-O

12 Fobruary 1968

SUDJECT:

Operational Report for Quarterly Period Ending 31 January 1968, Headquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65) (UIC): WCEETO

ITEM: Loss of voltage during generator operation.

DISCUSSION: During the past quarter units within the battalion have experienced unusual fluctuations of voltage and even the loss of one or more phases of power from the generators. The generators at the time appeared to be functioning properly. After checking power cables it was determined that the nuts on the load terminal were vibrating loose.

ODSERVATION: The generator operators sometime fail to check the nuts because of the inconvenient location of the item.

ITEM: AD-216 Running Lights and Deacons.

<u>DISCUSSION</u>: The difficulties encountered in testing tower lighting equipment prior to darkness has made it necessary to adopt a more satisfactory nethod of testing the equipment.

Made of the AD-216 tower which is equipped with running lights. Above certain heights, beacons are required. Sites are very often adjacent to airfields, making lighting compulsory. A problem existed in testing the lighting system during the day-light hours. An attempt to change the activation time of the photocell failed due to the sensitivity of the adjustment.

- 3. Training: None
- 4. Logistics:

ITEM: Improvised supports for airlifting radio vans.

<u>DISCUSSION</u>: In tactical airlifting situations it sometimes becomes impossible to use the lifting eyes provided on the radio vans for aerial movement.

ODSERVATION: In off loading an AN/TRC-129A van at Song be Airfield, one lifting eye on the van peeled off, rendering it useless for further movement. To overcome this handicap, a lifting pallet was constructed of four 8" x 12" timbers braced with two more 8" x 12" side rails. This made a satisfactory lifting platform with which the van was safely airlifted to the top of Nui Ba Ra.

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SCCVSG-CA-O

12 February 1968

SULJECT: Operational Report for Quarterly Period Ending 31 January 1968, Headquarters, 36th Signal Dattalion (CL), (RCS CSFON-65)

(UIC): WCEETO

ITEM: Evaporation of Fugasse when exposed to normal atmospheric conditions.

DISCUSSION: Dattalion units use fugasse as a defensive measure on outer perimeters at respective sites. During a recent test when fugasse was detonated by a blasting cap, those barrels that were unsealed did not explode; however, those barrels that were sealed exploded very rapidly.

OBSERVATION: Decause of the chemical properties of fugasse it may not detonate if exposed to the air for any extended period.

#### 5. Intelligence:

Protaction for Large Communications Structures.

DISCUSSION: With recent installation of large communications facilities i.e. fixed station communication conters, D30's, etc., great difficulty has been encountered in providing adequate physical protection for these relatively large buildings. Meeting necessary requirements is beyond or at best strains the capabilities of most signal units. Even with a considerable expense of manhours and material by operating units, protection afforded may still be less than desired.

ODSERVATION: Programming Large communications structures to include concrete walls or other self-contained revetments would free signal units from a difficult task which when completed does not always meet the minimum requirements for physical security.

ITEM: Effectiveness of Physical Security Measures.

DISCUSSION: Many sites ranned by personnel and equipment resources of this battalion were subject to considerable enoug activity during the quarter. This included recurring and often heavy mortar and rocket barrages, with impact to signal facilities as close as 10-15 neters in some incidents. The extremely limited and minor occurances of equipment damage and personnel injuries distinctly pointed out the advantages of complete physical protection for all resources.

SCCVSG-CA-O

12 February 1968

SULJECT: Operational Report for Quarterly Period Ending 31 January 1968, Headquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65)

(UIC): WCEETO

OBSERVATION: Continued emphasis on Physical Security measures for all personnel and equipment will contribute greatly to reduced casualties and damage resulting from enony activity.

#### Part II Recommendations

#### Recormend That:

- 1. Individuals who are adversly effected by the malaria pill be instructed to break the pill in half and take one half at two successive meals during the same day. This has minimized the discomforts suffered by many persons who previously took the nedication in one dose.
- 2. That the AN/FGC-25 be operated on 60 wpm circuits only, and that more sophisticated fixed station equipment capably of sustained high speed operation be acquired and installed on all 100 wpm circuits.
- TA-312/PT should not be used to test 20 HZ drop channel circuits from the terminals of the AN/TCC-13.
- 4. Information concerning utilization of the protective mask, M-17, be given wide distribution to enable other personnel to benefit from this lesson learned.
- To activate the tower lights in daylight hours without adjustment to the photocell, remove the thyratron control (V-1). This activates the beacon and running lights. They will remain on until the thyratron is replaced.
- 6. Supplementary supports be fabricated from readily available materials in order to insure that valuable equipment is not damaged by helicopters in the vicinity.

SCCVSG\_CA\_O

12 February 1968

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,

Hoadquarters, 36th Signal Dattalion (CA), (RCS CSFOR-65)

(UIC): WCEETO

7. Fugasse should remain sealed in its container at all times, or exposed to the atmosphere for only brief periods.

4 Incl

- 24 Sig Cp OPORD 4 67

2 - Mission Statements

3 - 36th Sig Dn OPORD 1-68

4 Charte

Withdrawn, Hqs, DA

CLARANCE J SCHLAFER

LTC, SigC/

SCCVSG-CO (12 Feb 68) lst Ind SUBJECT: Operational Report for the Quarterly Period Ending 31 January 1968 (RCS CSFOR-65) (WCMETO) (U)

DA, HRADQUARTERS, 2D SIGNAL GROUP, APO 96491 55 5 88

THRU: Commanding General lst Signal Brigade (USASTRATCOM) APO 9638h

> Commanding General United States Army Vietnam APO 96374

> Commander-in-Chief United States Army Pacific APO 96558

TO: Assistant Chief of Staff for Force Development Department of the Army Washington, D. C. 20310

- 1. (U) Operational Report for Quarterly Period Ending 31 January 1968 submitted by the 36th Signal Battalion has been reviewed and found to be adequate, with the following comments noted:
- a. Section II, Part I, paragraph 1 and Section II, Part II, paragraph 1. It has been the experience of some personnel that breaking the malaria pill in half eliminates some of the discomfort for those adversely affected. Recommend competent medical authority further evaluate this recommendation to determine if this procedure provides the same protection as taking the pill at one time.
- b. Section II, Part I, paragraph 2 and Section II, Part II, paragraph 2, Operation of AN/FGC-25 Teletypewriter set at 100 wpm. Future problems are expected in this area as 100 wpm circuits cause accelerated deterioration and failures are more frequent; additional equipment will be needed to provide back-up or replacement during prolonged useage. This is also a contributing factor to the high percentage of services; lesser service rates are recorded on circuits operating at 60 wpm.
- c. Section II, Part I, paragraph 2, and Section II, Part II, paragraph 3, Trouble shooting signaling circuits. The obvious solution to the problem is to remove the TA-312 from the circuit upon completion of trouble shooting. There is no apparent reason to leave the telephone connected to the line.

2

SCCVSG-CO (12 Feb 68)

1st Ind

SUBJECT: Operational Report for the Quarterly Period Ending 31 January

1968 (RCS CSFOR-65) (WCEETO) (U)

- d. Section II, Part I, paragraph 2, Loss of Voltage during Generator Operation. Checking for loose connections or terminal nuts should be included in all pre and post operative checks. Recommend increased supervision and attention be given to these daily checks.
- e. Section II, Part I, paragraph 2 and Section II, Part II, paragraph 5. If a photo cell activates the lights all that is needed is a cover over the cell to test the lighting system during the day.
- f. Section II, Part I, paragraph 4 and Section II, Part II, paragraph 6. The lifting platform described is a satisfactory field expedient; however, it is unacceptable substitute if the equipment were to be placed on a truck. When dismounting the equipment from a vehicle, the shelter should be placed on rails to prevent premature deterioration of the wood due to exposure to moisture. Additionally, new lifting eyes can be attached to the shelters.
- g. Section II, Part I, paragraph 5, Protection for Large Communications Structures. (Reference: 2d Signal Group ORLL for Period Ending 31 October 1967, UIC: WCDXAA, page 42) (Reference: Special Lessons Learned for 1st Signal Brigade, dated 20 February 1968). This problem has been repeatedly emphasized with negative results. I concur completely in the observation.
- 2. (U) I concur in the commander's Observations and Recommendations portions of the report, except as noted above.

DANIEL C. BIRD

Colonel, SigC

Commanding

SCCVOP (12 Feb 68)

2d Ind

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968, from 36th Signal Battalion (CA), (RCS CSFOR-65) (WCEETO)

DA, HQ, 1st Sig Bde (USASTRATCOM), APO SF 96384 SMAR 1968

TO: Commanding General, United States Army Vietnam, ATTN: AVHGC-DH, APO 96375

Commanding General, United States Army Strategic Communications Command, ATTN: SCCOP, Fort Huachuca, Arizona 85613

- 1. Subject report is forwarded for your information.
- 2. Concur in the Commander's observations. The following additional comment is provided with respect to Section II, Part I (Observations).

Item: Protection for Large Communication Structures, page 16. Programing large communication structures to include revetments is desirable; however, Engineer policy in Vietnam is that skilled Engineer personnel generally will not be used for protective construction work.

3. Nonconcur in the Commander's observation as stated in Section II, Part I, on the following item:

Item: Operation of AN/FGC-25 Teletypewriter set at 100 wpm, page 12. The AN/FGC-25 teletypewriter is fixed station equipment that will operate at 100 wpm in this environment if properly maintained.

4. Concur in the Commander's recommendations as stated in Section II, Part II, except:

AS D. BLEDSCE.

Colonel, GS Chief of Staff

Recommendation: 2, page 17. See paragraph 3 above.

FOR THE COMMANDER:

21

AVHGC-DST (12 Feb 68)

3d Ind (U)

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,

Headquarters, 36th Signal Battalion (CA), (RCS CSFOR-65)

(UIC): WCKETO

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT, APO 96558

- 1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 January 1968 from Headquarters, 36th Signal Battalion (CA) (CEET) as indorsed.
- 2. Pertinent comment follows: Reference item concerning malaria pill, page 12, paragraph 1; page 17, paragraph 1; and 1st Indorsement, paragraph 1a. Concur with qualifications. The choroquine-primaquine (C-P) tablet does affect a significant number of personnel with side effects, such as diarrhea, abdominal cramps, headache, malaise, and insomnia. It has been noted that breaking the tablet in half does alleviate these side effects in many personnel. This probably occurs through diffusing the absorption through a greater portion of the gut. In personnel whom this does not offer sufficient relief, the administration of one half of the tablet at two successive meals would minimize the side effects. This should not be recommended as a routine for all personnel, but only those with significant side effects as recommended by medical officers. The effectiveness of the C-P should not be decreased by these methods of administration.
- 3. A copy of this indorsement will be furnished to the reporting unit through channels.

FOR THE COMMANDER:

C. S. NAKATSUKASA Captain, AGC Assistant Adjutant General

Copies furnished: HC, 1st Sig Bde (USASTRATCOM) HQ, 36th Sig Bn (CA)

GPOP-DT (12 Feb 68) 4th Ind (U)

SUBJECT: Operational Report for the Quarterly Period'

Ending 31 Jan 68 from HQ, 36th Sig Bn (CA)

(UIC: WCEETO) (RCS CSFOR-65)

HQ, US Army, Pacific, APO San Francisco 96558 22 MAR 1968

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D.C. 20310

This headquarters has evaluated subject report and forwarding indorsements and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:

C. F. OSBOUR

MAJ, AGC Assi AG

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